

Figure 20 illustrates a swap move, according to one embodiment. As mentioned above, a swap move may be used to equalize or adjust the use of resources in a network (e.g., to put more demanding users with faster computer blades). The computer blades may be switched by two users, such as computer blades 2001 and 2003. Information, such as, but not limited to, applications and settings from one computer blade 2001, may be present on another computer blade 2003, post move, and vice-versa. In one embodiment, information from one of the computer blades 2005 and 2007 performing a switch, may be stored in a temporary third location to preserve the target computer blade 2007 while the switching computer blade 2005 overwrites the target computer blade's information. For example, an intermediate image server 2009 (based on PXE Preboot Execution Environment (PXE) technology) may be used. Large-scale moves may also be within the scope of the invention. In moving multiple computer blades, moves may be scheduled for Operating System settings, profiles, applications, and user information from old computer blades to new computer blades.

Please replace the paragraph originally beginning on page 52, line 1 with the following paragraph:

In one embodiment, DCI may include socket-level communications services provided through a multi-threaded server. In one embodiment, DCI may include embedded support for HTTP hypertext transport protocol (HTTP) communications provided through a multi-threaded server. In one embodiment, DCI may include embedded support for free-form XML communications provided through a multi-threaded server. In one embodiment, DCI may include SOAP protocol Simple Object Access Protocol or Service Oriented Architecture Protocol (SOAP) support.

Please replace the paragraph originally beginning on page 54, line 3 with the following paragraph:

DCI may provide a windowed, graphical interface that can help visualize computational results or monitor progress of multiple jobs in a single environment. In one

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Jeffrey C. Hood, Reg. No. 35198, on 06/06/2008 & 06/11/2008.

3. In the specification amends as following:

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6/27/08

a. Page 11, lines ~~21-22~~²⁴⁻²⁵, replace "SYSTEM AND METHOD FOR
PROVIDING A REMOTE UNIVERSAL SERIAL BUS" with "**EXTENDING
A UNIVERSAL SERIAL BUS TO ALLOW COMMUNICATION WITH USB
DEVICE AT A REMOTE LOCATION**"; line 26, insert ", now U.S. Patent
No. 6708247" after "Andrew Heller".

b. Page 12, line 1, insert ", now U.S. Patent No. 6735658" after
"Barry Thornton"; line 5, insert ", now U.S. Patent No. 6886055" after
"Barry Thornton"; line 20, insert ", now abandoned" after "Barry
Thornton"; line 26, insert ", now abandoned" after "Barry Thornton".

embodiment, applications may make use of the built in communications, directory, and XML routing capabilities of the underlying infrastructure. These applications would ordinarily be large and complex and would have to either utilize cryptic APIs such as MPI Message Passing Interface (MPI) or contain implementations of sophisticated message passing and communications technology. In one embodiment, DCI eliminates most of this development and management overhead and provides a simple and consistent environment to develop, deploy, and manage distributed or cluster capable applications.

Please replace the paragraph originally beginning on page 54, line 13 with the following paragraph:

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changes

Figure 22 is a block diagram illustrating a DCI architecture according to one embodiment. Each of two or more computer blades 101 (A and B, in this example) runs an operating system (OS) 2302. In one embodiment, the OS 2302 handles basic tasks like networking over TCP/IP Transmission Control Protocol/Internet Protocol (TCP/IP). Each DCI-enabled computer system on the network 115 may include a DCI stack. The DCI stack may include the core DCI framework 2304, one or more peerlet APIs 2306, and one or more peerlets 2308.

Please replace the paragraph originally beginning on page 56, line 7 with the following paragraph:

In 2409, a DCI “listener” in the core DCI framework on computer B may receive the XML message. In one embodiment, the DCI listener may utilize a UDP User Datagram Protocol (UDP) server to listen for incoming packets over an IP-based network connection. The use of UDP rather than TCP may allow for the rapid shipment of packets without the overhead of TCP. The UDP server may be multi-threaded for increased scalability and improved response time. In one embodiment, the actual communication between DCI-enabled computers may use a more reliable mechanism such as TCP.

Please replace the paragraph originally beginning on page 57, line 7 with the following paragraph:

In one embodiment, the VNAS architecture is based on a collection of “store nodes” which may include ordinary desktops or workstations. The store nodes contribute their excess disk capacity to the VNAS volume. Mount points, including computers such as desktop PCs, may allow a user to point to a single hostname (from a list of several) to “mount” and view the VNAS volume. In one embodiment, VNAS supports industry-standard protocols (e.g., DAV Distributed Authoring and Versioning (DAV)) which negate the need for any special software to be installed on a typical PC desktop in order for the user to browse the VNAS volume. There may be several mount points on a VNAS network, thereby eliminating a single point of failure.

Please replace the paragraph originally beginning on page 59, line 22 with the following paragraph:

Figure 26 is a screenshot that demonstrates the simple manner in which commands can be broadcasted to every node (Blade or PC) running the DCI platform. The dialog box 2650 on the upper right hand side allows commands and arguments to be entered, while the simple results screen 2660 on the left shows the output of the command as received from a particular node. With functionality of this sort, management tasks such as distributed process listing across multiple operating systems, process deletion, or invocation, may be easy to implement and use.

Please replace the paragraph originally beginning on page 60, line 7 with the following paragraph:

In one embodiment, the Autonomous Intelligent Management System (AIMS) includes a collection of agents, applications, and tools built on top of the Distributed Computing Infrastructure. AIMS may augment the capabilities of human ~~IT~~ Information